EMBEDDED TOROIDAL INDUCTORS

ABSTRACT OF THE DISCLOSURE

A method for making an embedded toroidal inductor (118) includes forming in a ceramic substrate (100) a first plurality of conductive vias (102) radially spaced a first distance from a central axis (101) so as to define an inner circumference. A second plurality of conductive vias (104) is formed radially spaced a second distance about the central axis so as to define an outer circumference. A first plurality of conductive traces (110) forming an electrical connection between substantially adjacent ones of the first and second plurality of conductive vias is formed on a first surface (106) of the ceramic substrate. Further, a second plurality of conductive traces (110) forming an electrical connection between circumferentially offset ones of the first and second plurality of conductive vias is formed on a second surface of the ceramic substrate opposed from the first surface to define a three dimensional toroidal coil.